VNA HealthCare

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Testimony for Bill No. 6838

Good morning Senator Harris, Senator Handley, Representative Sayers, members of the committee, ladies and gentlemen. My name is Beka Apostolidis. I am here as a clinician and representative of VNA Healthcare. I have been a nurse for ten years, specializing in cardiology. I worked at Hartford Hospital as a staff nurse and unit manager. I'm currently the cardiac program manager at VNA Healthcare.

I'm here today to support the use of telemedicine in healthcare. VNA Healthcare has been utilizing telemonitors since 2002. We first began with approximately 40 monitors, focusing on cardiac and pulmonary patients. Presently we are monitoring over 150 patients with varying diagnoses.

Telemonitors are small electrical devices placed in patients' homes. The telemonitor is programmed at a certain time during the day to obtain a patient's vital signs. It 'speaks' to the patient, instructing them step by step on how to use the device. It can be programmed in up to ten different languages. The telemonitor obtains the patient's weight, blood pressure, heart rate, oxygen saturation, and temperature. The patient is then asked four to five diagnosis specific questions in which he/she is instructed to answer either 'yes' or 'no'. The monitor also has peripheral devices, such as a six second single lead ekg to monitor patients with arrhythmias. The patient's information is then transmitted to our office where a telemonitor nurse reviews and triages the data. If needed, patients receive a phone call or a nurse is sent to see them for further evaluation.

There are three main goals and objectives for our telemonitor program:

1. Improve clinical outcomes by managing patients with chronic diseases and addressing interventions in a timelier, cost effective manner. The goal is improve the patient's self-efficacy. Patients who take their vital signs seven days a week have direct and immediate feedback on how their diet and/or medication effects their health. This in essence, improves patient compliance and belief that they are able to manage their disease. Therefore, patients are more likely to take their medication as prescribed and call a healthcare provider with reportable symptoms. As a result, patients decrease the likelihood of an emergency room visit or hospitalization.

2. Decrease skilled nursing visits for telemonitor patients. Nurses who have patients on the telemonitor are able to view and assess the patient's vital signs seven days a week. Patients on the telemonitor receive phone calls by the telemonitor nurse throughout the week regarding their current health status. This allows the nurse to

decrease the number of visits to those patients who are on a monitor and make better use of scarce nurse resources.

3. Decrease ER visits and rehospitalizations of telemonitor patients. Patients with chronic diseases, such as congestive heart failure, experience a higher rate of rehospitalizaitons and emergency room visits. As a results, costs to care for these patients rises. Studies have shown that interventions, such as the use of telemonitors reduces thirty day readmission rates of congestive heart failure patients by 20%. With the use of the telemonitor, physicians are able to make

medication adjustments and see how the patient responds without having to hospitalize him/her.

To date our agency has serviced over 2300 telemonitor patients with approximately 27% living in Hartford. Over 96% of telemonitor patients believed it was useful in assisting them with the management of their health. Numerous patients have commented that the telemonitor has kept them out of the hospital. One patient believes that the telemonitor 'saved her life'.

Moving forward, pilot studies need to focus on key components of telemedicine. First, patients should be monitored not only during an acute episode but also for a specific time frame afterwards. To truly evaluate a patient's compliance and self-efficacy, the telemonitor should be left in the home after healthcare personnel have discharged the patient from their services. Also, physician 'buy in' is a major component. Physicians and healthcare agency nurses need to be working together to serve homecare patients. For instance, physicians who write standing order for their patients increase the patients' independence and potentially prevents unnecessary hospitalizations or emergency room visits. In addition, patients need to be evaluated on an individual basis to ensure that they fully understand the responsibility of telemedicine, self-monitoring, and compliance

As our population continues to age and the number of people with chronic illnesses increases, healthcare providers are faced with the challenge of providing quality, cost effective care. Various studies have shown the effectiveness of telemedicine, however, further research can only enhance and support positive outcomes.

Thank you for the opportunity to speak today and I would be happy to answer any questions.

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VNAHC Telemonitor Program

Program History

- VNAHC Telemonitor program began in 2002
- RN Cardiac Specialist/Program Manager hired in 2002
- Hartford Office began implementation of Telemonitoring for Cardiac patient population in 2002, Waterbury 2004
- Development of Clinical Outcome Performance Measures in 2002
- Development and implementation of Cardiac Education Program for cardiac team nurses in 2003
- Other diagnoses added to inclusion criteria; pulmonary, surgical, orthodpedic, neurological in 2004

Goals and Objectives

- Improve clinical outcomes by addressing interventions in a more timely, cost effective manner
- Decrease skilled nursing visits for telemonitor patients
- Decrease ER visits and rehospitalizations of telemonitor patients

Outcomes

- To date, over 2,300 patients have been placed on the telemonitor
- Skilled Nursing visits for CHF patients have been decreased by approximately 2 visits per patient since 2004
- Significant improvement in Cardiovascular patients from 4th Qtr FY 05 to 4th Qtr FY 06 in the following Medicare Outcomes patient reporting: dyspnea, upper and lower body dressing, oral med mgmt, bathing, and transfers

Literature Support

- In 2004, direct and indirect costs for CHF were $28.6 million. Hospital discharges for CHF climbed to 995,000 in 2001, an increase of 164% over the past 20 years (ANS, 2005)
- Disease management has been identified to reduce rehospitalization/ ER visits, improve health outcomes, and reduce healthcare costs in CHF patients (AHA, 2004)
- Meta analysis (18 studies) showed comprehensive d/c planning in addition to discharge support for patients with CHF reduced readmission rates and may improve mortality and ADLs without increasing costs (JAMA, 2004)
- A study in 2001 showed CHF patients receiving telecare who were readmitted had an average cost that was 86% lower than in CHF patients receiving usual care

($5,850 v. $44, 479) Telecare CHF patients also had significantly less ER visits (P=.03) (Med Care, 2001).

- Another study focusing on CHF patients showed that the 30 day readmission rate for patients with CHF were reduced from 23% to 3% with the use of telemonitors (AACN, 2003